

WHAT IS CLAIMED IS:

1. A steam jet drum washing machine comprising:

a tub disposed in a casing and adapted so that wash  
5 water is supplied into the tub;

a drum rotatably mounted in the tub and adapted so that  
clothes are put in the drum and the wash water is supplied  
into the drum;

a water-supply unit disposed at one side of the tub for  
10 supplying the wash water into the tub; and

a steam generator for heating the wash water to generate  
high-temperature steam and supplying the generated high-  
temperature steam into the tub and the drum, the steam  
generator comprising:

15 - an airtight container connected to the water-supply  
unit for storing the wash water;

- a heater mounted in the container for heating the wash  
water stored in the container;

- an inlet valve disposed between the water-supply unit  
20 and the container for supplying the wash water into the  
container; and

- an outlet tube having the upper end disposed in the  
upper part of the container and the lower end disposed outside  
the container for guiding steam into the steam tube.

2. The machine as set forth in claim 1, wherein the water-supply unit comprises:

a water-supply valve assembly disposed at one end of the casing for supplying the wash water;

5 a water-supply tube having one end connected to the water-supply valve assembly and the other end connected to the container for supplying the wash water into the container; and

a steam tube having one end connected to the outlet tube and the other end disposed in the tub and the drum for  
10 supplying the steam into the tub and the drum.

3. The machine as set forth in claim 1, wherein the water-supply unit comprises:

a water-supply valve assembly disposed at one end of the  
15 casing for supplying the wash water;

a detergent box assembly mounted between the water-supply valve assembly and the tub for storing a detergent;

a water-supply tube connected between the water-supply valve assembly and the container;

20 an auxiliary water-supply tube connected between the water-supply valve assembly and the detergent box assembly; and

a steam tube having one end connected to the outlet tube and the other end disposed in the tub and the drum for  
25 supplying the steam into the tub and the drum.

4. The machine as set forth in claim 2, wherein the end of the steam tube disposed in the tub and the drum penetrates through the upper end of a gasket for preventing leakage of water between the tub and the casing.

5

5. The machine as set forth in claim 1, wherein the container is provided at the upper part thereof with a steam storing space, the steam storing space being upwardly protruded for storing the steam.

10

6. The machine as set forth in claim 5, wherein the upper end of the outlet tube is disposed inside the steam storing space.

15

7. The machine as set forth in claim 6, wherein the outlet tube is formed in the shape of a straight cylindrical pipe.

20

8. The machine as set forth in claim 1, wherein the heater is horizontally disposed in the lower part of the container so that the heater can be submerged under the wash water even when the wash water is supplied into the container to the minimum water level.

25

9. The machine as set forth in claim 8, wherein the

heater is an electric heater formed in the shape of a curved pipe so that the heating surface area is increased.

5 10. The machine as set forth in claim 1, wherein the inlet valve is a solenoid valve.

10 11. The machine as set forth in claim 1, wherein the steam generator further comprises a temperature sensor for sensing the temperature inside the container to control the operation of the heater on the basis of the temperature inside the container.

15 12. The machine as set forth in claim 1, wherein the steam generator further comprises a blowing fan mounted in the outlet tube or the steam tube for blowing the steam into the tub and the drum.

20 13. The machine as set forth in claim 5, wherein the steam generator further comprises a wash-water flow restraining unit mounted in the container for restraining flow of the wash water stored in the container to maintain uniform water level in the container.

25 14. The machine as set forth in claim 13, wherein the wash-water flow restraining unit comprises:

a first partition downwardly extended from the top of the container around the steam storing space; and

a second partition upwardly extended from the bottom of the container around the first partition.

5

15. The machine as set forth in claim 14, wherein the first and second partitions are provided at the lower parts thereof with through-holes, respectively, the wash water flowing between the tub and the drum through the through-holes.

10

16. The machine as set forth in claim 1, wherein the steam generator is disposed above the tub between the tub and the casing.

15

17. The machine as set forth in claim 1, wherein the steam generator is disposed below the tub between the tub and the casing.